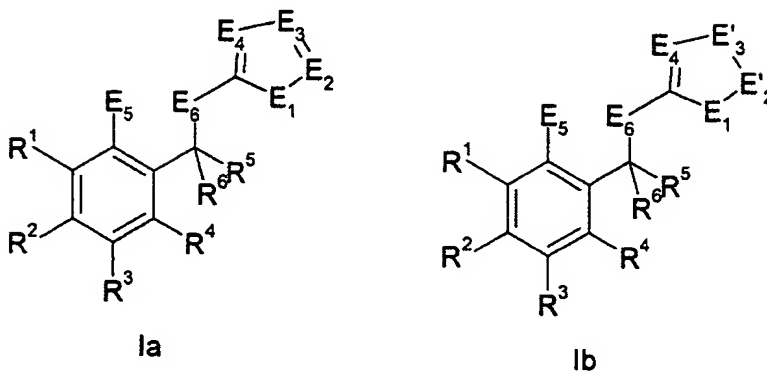


AMENDMENTS TO THE CLAIMS

1. (currently amended) A compound of the formula Ia or Ib:



where,

in the formula Ia,

$\underline{E1E1}$ is O, S, Se, Te, NR, CR₂, ~~PR~~, or PR;

$\underline{E2E2}$, $\underline{E3E3}$ are each CR, N, ~~P~~, or P;

$\underline{E4E4}$ is N, ~~P~~, or P;

$\underline{E5E5}$ is OH, SH, NHR, ~~or~~ OR', SR', ~~NRR'~~, or NRR';

$\underline{E6E6}$ is NH, PH, ~~or~~ NR', ~~PR~~, or PR';

R⁵, R⁶ are each hydrogen or a linear, branched or cyclic alkyl radical or an aryl radical[[],];

R¹, R², R³, R⁴ are each hydrogen, a linear, branched or cyclic alkyl radical, an aryl radical, a halogen or a nitro group[[],];

R is hydrogen, a linear, branched or cyclic alkyl radical[[],];

R' is a linear, branched or cyclic alkyl radical[[],];

where at least one of the groups $\underline{E5E5}$ and $\underline{E6E6}$ contains a hydrogen atom; and

in the formula Ib,

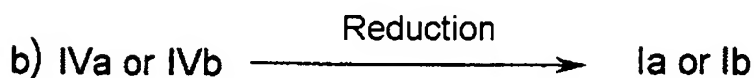
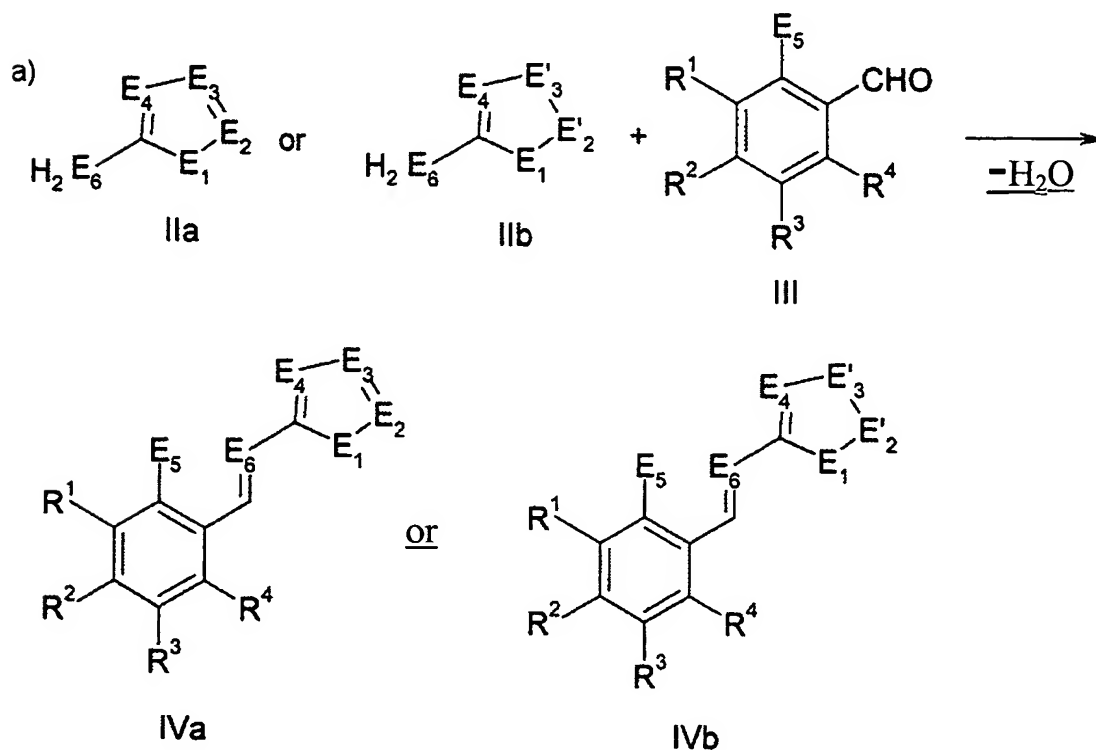
the symbols $\underline{E1E1}$, $\underline{E4E4}$, $\underline{E5E5}$, $\underline{E6E6}$, R⁵, R⁶, R¹, R², R³, R⁴, R and R' are as defined in formula Ia;

and

$\text{E}_2'\text{E}'_2$ and $\text{E}_3'\text{E}'_3$

are each O, S, Se, Te, NR, CR_2 , or PR.

2. (currently amended) A compound as claimed in claim 1, wherein E_1E_1 is S.
3. (currently amended) A compound as claimed in claim 1, wherein E_4E_4 is N.
4. (currently amended) A compound as claimed in claim 1, wherein E_6E_6 is NH.
5. (currently amended) A process for preparing a compound as claimed in claim 1, which comprises reacting a compound of the formula IIa or IIb with a compound of the formula III to form a compound of the formula IVa or IVb (step a)) and subsequently reducing the compound of the formula IVa or IVb to give a compound of the formula Ia or Ib (step b)):



where

E_1E_1 is O, S, Se, Te, NR, CR₂, PR, or PR;

E_2E_2 , E_3E_3 are each CR, N, P, or P;

$E_2'E_2$, $E_3'E_3$ are each O, S, Se, Te, NR, CR₂, PR, or PR;

E_4E_4 is N, P, or P;

E_5E_5 is OH, SH, NHR, OR', SR', or NRR'[[,]];

E_6E_6 is NH, PH, NR', or PR'[[,]];

R^5 , R^6 are each hydrogen or a linear, branched or cyclic alkyl radical or an aryl radical[[,]];

R^1 , R^2 , R^3 , R^4 are each hydrogen, a linear, branched or cyclic alkyl radical, an aryl radical, a halogen or a nitro group[[,]]; and

R is hydrogen, a linear, branched or cyclic alkyl radical[[,]]; and

R' is a linear, branched or cyclic alkyl radical[[,]]; where at least one of the groups E_5E_5 and E_6E_6 contains a hydrogen atom.

6. (previously presented) A metal complex comprising a compound as claimed in claim 1.

7. (currently amended) A metal complex of the formula V



where

L is a monoanionic or dianionic ligand derived from a compound of the formula Ia or Ib as claimed in claim 1

where,

- in the case of a dianionic ligand,

E_5E_5 is O⁻, S⁻, RN⁻, or RN⁻; and

E_6E_6 is N⁻, P⁻, or P⁻,

and, in the case of a monoanionic ligand,

either

E_5E_5 is O⁻, S⁻, RN⁻, or RN⁻ and

E_6E_6 is NR, PR, or PR,

or

E_5E_5 is OR, SR, NRR', or NRR' and

E_6E_6 is N, P, or P;

and E_1 is O, S, Se, Te, NR, CR₂, or PR;

E_2, E_3 are each CR, N, or P;

E'_2, E'_3 are each O, S, Se, Te, NR, CR₂, or PR;

E_4 is N, or P;

R^1, R^2, R^3, R^4 are each hydrogen, a linear, branched or cyclic alkyl radical, an aryl radical, a halogen or a nitro group;

R^5, R^6 are each hydrogen or a linear, branched or cyclic alkyl radical or an aryl radical;

R is hydrogen, a linear, branched or cyclic alkyl radical; and

R' is a linear, branched or cyclic alkyl radical;

~~the further symbols $E_1, E_2, E'_2, E_3, E'_3, E_4, R^5, R^6, R^1, R^2, R^3, R^4, R$ and R' in the formulae I and II have the same meanings as forth for the corresponding symbols in claim 1;~~

and, when L is a dianionic ligand,

M is Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, ~~W~~, or W;

R'' is hydrogen, a hydrocarbon radical, NR^{'''}₂, OR^{'''}, halogen, acetylacetonate, where R''' is hydrogen or a linear, branched or cyclic alkyl radical[[,]];

Y is a Lewis ~~acid~~, base;

x is 1 or 2[[,]];

y is from 1 to 4[[,]]; and

z is from 0 to 2,

where R'' and Y may be joined to form a joint radical and $2x + y$ corresponds to the valence of M;

or, when L is a monoanionic ligand,

M is Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, Ni, Pd, Co, Fe, Cu, Ru, ~~Rh~~, or Rh;

R'' is hydrogen, a hydrocarbon radical, NR^{'''}₂, OR^{'''}, halogen, or acetylacetonate, where R''' is hydrogen or a linear, branched or cyclic alkyl radical[[,]];

Y is a Lewis ~~acid~~, base;

x is 1, 2 or 3[[,]];

y is from 1 to 4[[,]]; and

- z is from 0 to 2[[,]]; where R" and Y may be joined to form a joint radical and x + y corresponds to the valence of M.
8. (original) A metal complex as claimed in claim 7, wherein the ligand L is a dianionic ligand and M is Ti, Zr or Hf.
 9. (original) A metal complex as claimed in claim 8, wherein x is 1, y is 2 and z is 0.
 10. (original) A metal complex as claimed in claim 7, wherein the ligand L is a monoanionic ligand and M is Ti, Zr, Hf, Ni or Pd.
 11. (currently amended) A metal complex as claimed in claim 10, wherein when M is Ti, Zr, or Hf, x is 2, y is 2 and z is 0 or x is 1, y is 3 and z is 0 and when M is Ni or Pd, x is 1, y is 1 and z is 0.
 12. (previously presented) A process for preparing a metal complex as claimed in claim 7 by deprotonation of a compound of formula Ia or Ib by means of a base and subsequent reaction with a metal compound, or
by direct reaction of a compound of formula Ia or Ib with a metal compound,
where the metal compound comprises a metal M selected from the group consisting of Ti, Zr, Hf, V, Nb, Ta, Cr, Mo and W, when L is a dianionic ligand, or a metal M selected from the group consisting of Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, Ni, Pd, Co, Fe, Cu, Ru and Rh, when L is a monoanionic ligand.
 13. (currently amended) A catalytically active composition comprising:
 - a) a metal complex of the formula V as claimed in claim 7 as component A[[,]]; and
 - b) at least one compound, as component B, selected from the group consisting of
 - (b1) an organometallic compound, as component B1,
 - (b2) an organoaluminum oxy compound, as component B2, and
 - (b3) a compound which reacts with the metal complex to form an ion pair, as component B3.
 14. (original) A catalytically active composition as claimed in claim 13 which further comprises a support material (component C) in addition to the components A and B.
 15. (previously presented) A process for preparing a catalytically active composition as claimed in claim 13 which comprises bringing a metal complex of the formula V

(component A) into contact with a compound (component B) selected from the group consisting of

- (b1) an organometallic compound, as component B1,
- (b2) an organoaluminum oxy compound, as component B2, and
- (b3) a compound which reacts with the metal complex to form an ion pair, as component B3,

and optionally a support material (component C).

- 16. (cancelled)
- 17. (previously presented) A process for the polymerization or copolymerization of olefins, which comprises polymerizing an olefin in the presence of a catalytically active composition as claimed in claim 13 or copolymerizing at least two different olefins in the presence of a catalytically active composition as claimed in claim 13.
- 18. (canceled).